

# BID SOLICITATION

Page 1 of 7  
Printed: 6/30/2006



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
CAPITOL HILL  
PROVIDENCE RI 02908

BUYER: JOHN OHARA 2ND  
PHONE #: (401) 222 - 2142 ext. 125

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CORRECTIONS  
DOC BUSINESS OFFICE  
39 HOWARD AVENUE  
CRANSTON RI 02920

**BID NUMBER: B06497**  
**TITLE: PERIMETER DETECTION SYSTEM**  
**BID OPENING DATE AND TIME:**  
**07/28/2006 1:40 PM**

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CORRECTIONS  
DOC CDC WAREHOUSE  
ATTN: SEE BELOW ON PO  
144 POWER RD  
CRANSTON RI 02920

Requisition Number(s): R77A071470

| Item | Class-Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Quantity | Unit | Unit Price | Total |
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|      | <p>THERE WILL BE A PRE-BID CONFERENCE ON 7/14/06 AT 10:00 AM.</p> <p>LOCATION:<br/>DEPARTMENT OF CORRECTIONS<br/>MAXIMUM SECURITY - 2ND FLOOR CONFERENCE ROOM<br/>1375 PONTIAC AVENUE<br/>CRANSTON, RI 02920</p> <p>BIDDER IS REQUIRED TO PROVIDE A BID SURETY IN THE FORM OF A BID BOND, OR A CERTIFIED CHECK PAYABLE TO THE STATE OF RHODE ISLAND, IN THE AMOUNT OF A SUM NOT LESS THAN FIVE PERCENT (5%) OF THE BID PRICE. BID SURETY MUST BE ATTACHED TO THE BID FORM. THE SUCCESSFUL BIDDER WILL ALSO BE REQUIRED TO FURNISH PERFORMANCE AND LABOR AND PAYMENT BONDS AT TIME OF TENTATIVE CONTRACT AWARD.</p> |          |      |            |       |

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|      | <p>BIDDERS ARE ADVISED THAT ALL PROVISIONS OF TITLE 37 CHAPTER 13 OF THE GENERAL LAWS OF RHODE ISLAND APPLY TO THE WORK COVERED BY THIS REQUEST, AND THAT PAYMENT OF THE GENERAL PREVAILING RATE OF PER DIEM WAGES AND THE GENERAL PREVAILING RATE FOR REGULAR, OVERTIME, AND OTHER WORKING CONDITIONS EXISTING IN THE LOCALITY FOR EACH CRAFT, MECHANIC, TEAMSTER, OR TYPE OF WORKMAN NEEDED TO EXECUTE THIS WORK IS A REQUIREMENT FOR BOTH CONTRACTORS AND SUBCONTRACTORS. THE PREVAILING WAGE TABLE MAY BE OBTAINED AT THE RI DIVISION OF PURCHASES HOME PAGE BY INTERNET at <a href="http://www.purchasing.state.ri.us">www.purchasing.state.ri.us</a>. SELECT "INFORMATION" AND THEN SELECT "PREVAILING WAGE TABLE". THE STATE OF RHODE ISLAND USES THE GENERAL DECISION NUMBER RI20030001. PRINTING THE ENTIRE DOCUMENT AVERAGES APPROXIMATELY ONE MINUTE PER PAGE - YOU MAY WANT TO PRINT ONLY THE PAGES APPLICABLE TO YOUR BID. BIDDERS NOTE: IN THE EVENT THIS BID SPECIFIES PRICE OFFERS ON A TIME-AND-MATERIALS BASIS, i.e., AN HOURLY RATE, ANY OR ALL BIDS SUBMITTED IN AN AMOUNT LESS THAN THE PREVAILING RATE IN EFFECT FOR THE WORK COVERED BY THIS REQUEST AS OF THE DATE OF BID ISSUANCE SHALL BE REJECTED BY THE DIVISION OF PURCHASES.</p> |          |      |            |       |

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|      | AN INSURANCE CERTIFICATE IN COMPLIANCE WITH PROVISIONS OF ITEM 31 (INSURANCE) OF THE GENERAL CONDITIONS OF PURCHASE IS REQUIRED FOR COMPREHENSIVE GENERAL LIABILITY, AUTOMOBILE LIABILITY, AND WORKERS' COMPENSATION AND MUST BE SUBMITTED BY THE SUCCESSFUL BIDDER(S) TO THE DIVISION OF PURCHASES PRIOR TO AWARD. THE INSURANCE CERTIFICATE MUST NAME THE STATE OF RHODE ISLAND AS CERTIFICATE HOLDER AND AS AN ADDITIONAL INSURED. FAILURE TO COMPLY WITH THESE PROVISIONS MAY RESULT IN REJECTION OF THE OFFEROR'S BID. ANNUAL RENEWAL CERTIFICATES MUST BE SUBMITTED TO THE AGENCY IDENTIFIED ON THE PURCHASE ORDER. FAILURE TO DO SO MAY BE GROUNDS FOR CANCELLATION OF CONTRACT. |          |      |            |       |

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|      | <p>NOTE: IF THIS BID COVERS CONSTRUCTION, SCHOOL BUSING, HAZARDOUS WASTE, OR VESSEL OPERATION, APPLICABLE COVERAGES FROM THE FOLLOWING LIST MUST ALSO BE SUBMITTED TO THE DIVISION OF PURCHASES PRIOR TO AWARD:</p> <ul style="list-style-type: none"><li>* PROFESSIONAL LIABILITY INSURANCE (AKA ERRORS &amp; OMISSIONS) - \$1 MILLION OR 5% OF ESTIMATED PROJECT COST, WHICHEVER IS GREATER.</li><li>* BUILDER'S RISK INSURANCE - COVERAGE EQUAL TO FACE AMOUNT OF CONTRACT FOR CONSTRUCTION.</li><li>* SCHOOL BUSING - AUTO LIABILITY COVERAGE IN THE AMOUNT OF \$5 MILLION.</li><li>* ENVIRONMENTAL IMPAIRMENT (AKA POLLUTION CONTROL) - \$1 MILLION OR 5% OF FACE AMOUNT OF CONTRACT, WHICHEVER IS GREATER.</li><li>* VESSEL OPERATION - (MARINE OR AIRCRAFT) - PROTECTION &amp; INDEMNITY COVERAGE REQUIRED IN THE AMOUNT OF \$1 MILLION.</li></ul> <p>BIDDERS ARE RESPONSIBLE FOR INSPECTION OF EQUIPMENT AND/OR LOCATION, TAKING MEASUREMENTS* WHEN REQUIRED, AND MAKING THEMSELVES AWARE OF THE TOTAL REQUIREMENT BEFORE SUBMITTING A BID. *MEASUREMENTS PROVIDED WITH ANY BID ARE FOR REFERENCE PURPOSES AND ARE NOT GUARANTEED TO BE COMPLETELY ACCURATE.</p> |          |      |            |       |

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| 1.0  | <p>VENDOR (OWNER OF COMPANY) IS RESPONSIBLE TO COMPLY WITH ALL LICENSING OR STATE PERMITS REQUIRED FOR THIS TYPE OF SERVICE. A COPY OF LICENSE/PERMIT SHOULD BE SUBMITTED WITH THIS BID. IN ADDITION TO THESE LICENSE REQUIREMENTS, BIDDER, BY SUBMISSION OF THIS BID, CERTIFIES THAT ANY/ALL WORK RELATED TO THIS BID, AND ANY SUBSEQUENT AWARD WHICH REQUIRES A RHODE ISLAND LICENSE(S), SHALL BE PERFORMED BY AN INDIVIDUAL(S) HOLDING A VALID RHODE ISLAND LICENSE.</p> <p>936-73</p> <p>TOTAL COST TO INSTALL AS SPECIFIED ON ATTACHED SPECIFICATIONS ONE (1) COMPLETE SECURITY SYSTEM, TO INCLUDE THE FOLLOWING:<br/>#1 2,000 (+/-) LINEAR FEET OF FENCE DETECTION SYSTEM<br/>#2 MICROWAVE INTRUSION DETECTION SYSTEM<br/>#3 PC BASED ALARM REPORTING/DISPLAY SYSTEM</p> <p>VENDOR TO REMOVE EXISTING SYSTEM AND TURN-OVER TO OWNER. INSTALL NEW EQUIPMENT TO INCLUDE ALL WIRING CONNECTORS AND SUPPORT/ATTACHMENT FASTENERS. ALL WIRING TO BE ABOVE-GROUND ROUTED ON FENCE BRACKETS AND ENTERED INTO FACILITY IN A WATERTIGHT SECURE INSTALLATION ABOVE GROUND.</p> | 1.00     | TOTAL |            |       |

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|      | <p>INTEGRATOR TO BE PROVIDED BY VENDOR. INSTALLER TO HAVE AT LEAST TEN (10) YEARS OF EXPERIENCE WITH SECURITY SYSTEM INSTALLATIONS.</p> <p>INSTALLER TO BE CERTIFIED BY SOUTHWEST MICROWAVE, INC. SOUTHWEST MICROWAVE TO BE RESPONSIBLE FOR ALL TESTING AND MONITORING OF SYSTEM FOR SIXTY (60) DAYS, 24-HOUR/7-DAYS PER WEEK TO DETERMINE BASELINE FAULT LOG AND ADJUST SYSTEMS AS REQUIRED.</p> <p>VENDOR TO PROVIDE THROUGH SOUTHWEST MICROWAVE THIRTY (30) DAYS OF TRAINING FOR THE DEPARTMENT OF CORRECTIONS. ATTENDANCE TO BE REQUIRED BY THE DEPARTMENT OF CORRECTIONS.</p> <p>SPECIFICATIONS ATTACHED (8-PAGE)<br/>PARTIAL PAYMENTS TO BE MADE</p> <p>VENDOR TO ADHERE TO THE FOLLOWING D.O.C. POLICIES:</p> <p>PROCEDURES FOR CONTRACTORS AT INSTITUTIONAL FACILITIES POLICY #9.40-2<br/>SMOKING AND TOBACCO REGULATIONS POLICY#8.08A</p> |          |      |            |       |

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|      | <p>WAIT TIME: ENTRY AND EXIT OF THE SECURED BUILDINGS OF THE D.O.C. WILL RESULT IN AN AVERAGE WAIT TIME OF ONE-HALF HOUR FOR EACH EXIT OR ENTRY. THIS AVERAGE WAIT TIME SHALL BE FACTORED INTO THE VENDORS HOURLY RATE QUOTE.</p> <p>EXCESSIVE WAIT TIME: IN THE EVENT THAT THE WAIT TIME IS EXTENDED BY MORE THAN ONE-HALF HOUR FOR EXIT OR ENTRY AS A RESULT OF CIRCUMSTANCES BEYOND THE VENDOR'S CONTROL, THE VENDOR WILL BE COMPENSATED FOR EXCESSIVE WAIT TIME ROUNDED TO THE NEAREST 15-MINUTE INCREMENT.</p> <p>CONTACT PERSON:<br/>RALPH LEE<br/>(401) 462-3066</p> <p>STARTING DATE _____ NO. OF WORKING<br/>DAYS REQUIRED FOR COMPLETION _____</p> |          |      |               |       |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |      | <b>TOTAL:</b> | _____ |

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# **STATE OF RHODE ISLAND – DEPARTMENT OF CORRECTIONS**

## **SPECIFICATIONS – INTREPID MicroPoint CABLE SYSTEM PERIMETER DETECTION SYSTEM HIGH SECURITY**

### **1.0 General**

- 1.1 It is the intent of the RI Department of Corrections to purchase a complete and operable outdoor perimeter detection system for the High Security Center as specified below and on referenced drawings and documents.
- 1.2 The following specifications are for an integrated microphonic coaxial sensor system for perimeter fence intrusion detection, microwave detection for gate areas and a PC base Alarm Reporting System.
- 1.3 The performance criteria required for this project shall meet or exceed that provided by the INTREPID MicroPoint Cable system as manufactured by Southwest Microwave, Inc., Tempe Arizona (480-783-0201)
- 1.4 The contractor shall provide all installation labor, hardware, and electronics for the system. After installation, the contractor shall secure the services of the manufacturer's technician to provide on-site technical assistance for installation inspection, testing, and training.
- 1.5 The contractor shall provide certification as part of the project submittals, that the sensor manufacturer's on-site services will be provided as part of this contract.
- 1.6 The contractor shall furnish a PC based Alarm Reporting and Display system necessary for the audible and visual notification of all system activity. A printer shall provide a hard-copy printout of all system activity.

### **2.0 System Description**

- 2.1 The complete perimeter detection system shall consist of three (3) primary systems:
  1. INTREPID Fence Intrusion Detection System
  2. Microwave Intrusion Detection System
  3. PC Based Alarm Reporting/Display System
- 2.2 MicroPoint Cable Fence Intrusion Detection System
  - 2.2.1 The fence-mounted system shall utilize a microphonic sensing element, designed to detect vibrations from cut or climb over attempts to the fence fabric and subsequently identify the precise point of intrusion to within 10-feet (3m).



- 2.2.2 Each Processor Module (PM) shall monitor up to 1,316 feed (400m) of Micropoint cable.
- 2.2.3 Detection and location of intrusions shall be performed by DTDR (Digital Time Domain Reflectometry) methodology. The DTDR function shall reside in the distributed PM's and not in a centralized processor or computer.
- 2.2.4 The DTDR processing within the PM's shall provide for Free Format Zoning, allowing Zones to be established in software independent of the fixed PM locations.
- 2.2.5 The length of each zone in the system shall not be restricted to the physical location of the fixed PM's but shall be variable between 3 meters and the maximum zone length as indicated elsewhere in the specifications or project drawings.
- 2.2.6 The fence sensor shall provide "Sensitivity Leveling" on a meter by meter basis which automatically compensates for fence variations making each meter of fence equally sensitive to intrusions.
- 2.2.7 Fence sensor zone configurations shall be based on the design criteria listed below.
  - 1. Fence zones should not exceed 300 linear feed (91m) in length.
  - 2. To assist in patrol assessment, the entire length of any fence zone shall be visible from any point along that zone as viewed from the outside or perimeter road.
  - 3. Fence zones shall not extend around corners in perimeter fencing.
- 2.2.8 The fence sensor shall employ Point Impact Discrimination, made possible by DTDR technology, which detects single location activity (climbing or cutting the fence) while rejecting other distributed environmental conditions (wind, rain, or thunder). The digital signal processing (DSP) shall utilize both temporal and spatial filtering.

## 2.3 Microwave Intrusion Detection System

- 2.3.1 The microwave intrusion detection system shall provide protection for sliding gates, swing gates, rooftops that form part of the perimeter, or other areas not secured by chain link fencing.
- 2.3.2 Each ground based microwave zone shall consist of single or stacked (dual head) microwave links as recommended by the manufacturer, using separate transmitter and receiver stacks.
- 2.3.3 All microwave equipment shall be provided directly by the original equipment manufacturer. To insure engineering and application support, products that contain repackaged circuit board assemblies will not be acceptable.

**2.4    Alarm Reporting/Display System**

- 2.4.1 The Alarm Reporting/Graphic Display system shall communicate via RS232, RS485 or RS422 with the various Processor Modules (PM's) distributed around the perimeter.
- 2.4.2 Communication between the exterior PM's shall be provided via the actual fence mounted sensor cable using FSK signaling, precluding the need for additional signal cables around the perimeter.
- 2.4.3 Audible annunciation and visual indication for each alarm event will be provided by a monitor display in the control room. The monitor shall indicate a flashing dot along the zone identifying the exact location within 10 feet (3m) of the intrusion.
- 2.4.4 All system activity shall be permanently recorded on an 8.5" x 11" paper printer and shall be stored on the hard drive.
- 2.4.5 The perimeter fence zoning shall be established in the PC software and downloaded to each respective PM. The zoning can be changed via software as required without a need for a change in hardware.

**3.0    Products – Fence Sensor System**

**3.1    MicroPoint Cable**

- 3.1.1 Intrusion of any zone shall be identified to within 10 feet (3m) of the attack. Multiple attacks at different locations, even within the same zone, will be identified separately on the PC Alarm Reporting system.
- 3.1.2 Depending on the perimeter length and number of auxiliary devices, the Intrepid Sensor cable shall be capable of providing power to the exterior PM's without additional cabling. The manufacturer shall advise the contractor on this capability for this specific project.
- 3.1.3 The system shall allow for the de-sensitizing of any section of the sensor cable (gate areas, lead in cables, etc.) precluding the necessity for spliced non-sensitive cable.

**3.2    Processor Module (PM)**

- 3.2.1 Detection processing shall be performed by the various Processor Modules (PM's) distributed around the perimeter. Each PM shall provide processing for up to 1,312 feet (400m) of sensor cable.
- 3.2.2 Detection criteria and zoning boundaries shall reside in non-volatile memory in each respective PM.

- 3.2.3 Field locations of the PM's shall be determined by such factors as perimeter length, operational convenience, and physical security concerns with no regard to detection zoning.
- 3.2.4 In the event of a temporary loss of communication with the central PC, each PM shall have the capability of storing system activity and upload same when communication is resumed.
- 3.2.5 A "Fall Alarm" (distinct from the intrusion and tamper alarms) will be provided by the PM under conditions of power failure, cable fault, or component failure.
- 3.2.6 All the modules shall operate within specification at temperatures between -40F (-40C) and 159F (+70C) degrees ambient, continuously without assistance from cooling or heating apparatus.
- 3.2.7 All modules shall operate within all specification when continuously exposed to 95% relative humidity, non-condensing.
- 3.2.8 The PM's shall be provided in RFI/EMI ABS UV stabilized plastic enclosures fitted with tamper switches.
- 3.2.9 The PM's shall be capable of accepting contact-closure alarm inputs from auxiliary devices (ie, microwave, PIR, etc.) and provide alarm interface to the central control room display.
- 3.2.10 The PM's shall provide up to 150mA at 12 vdc to auxiliary sensors.

#### **4.0 Products – Microwave Detection Units**

- 4.1 The bistatic microwave units shall have a range of 10 feet (3m) to 600 feet (183m) and a beam diameter of 2 feet to 40 feet (0.6m to 12.2m) depending on link length, antenna pattern element and sensitivity setting.
- 4.2 The bistatic microwave units shall detect at minimum an 80 pound human – walking, running, hands and knees crawling, jumping, rolling or prone crawling (30cm diameter metal sphere) at a target velocity 0.1 ft/sec to 50 ft/sec (3cm/sec to 15m/sec).
- 4.3 The bistatic microwave units shall have field adjustable sensitivity control by means of an internal potentiometer. Require no special adjustment tools.
- 4.4 The bistatic microwave units shall have an output power of 10 milliwatts peak, 5 milliwatts average, and shall be square wave modulated.
- 4.5 The bistatic microwave units shall operate at a carrier frequency of X-band (10.525 GHz  $\pm$  15 MHz) and have four selectable modulation frequencies at 3.0, 4.5, 7.5, 10.5 kHz  $\pm$  3%.

- 4.6 The bistatic microwave system shall incorporate an X-ban, mechanically tuned GaAs FET transistor oscillator as the signal source, illuminated by a parabolic reflector with a rear-entry dielectric feed. The system shall conform to radiation characteristics of F.C.C. Rules and Regulations, Part 15.
- 4.7 The bistatic microwave system shall operate on an input voltage of 1.5 to 14 Vdc and current draw of 20 mA (transmitter) and 20 mA (receiver).
- 4.8 The bistatic microwave system shall provide alarm indication by relay contacts. Contact rating 2 amps at 28 Vdc. (FormC)
- 4.9 The bistatic microwave system shall have a tamper switch that protects unauthorized removal of radome. Indication shall be by contacts – one normally open, one normally closed and one common. Contact rating 10 amps at 28 Vdc.
- 4.10 The bistatic microwave system shall have a diameter of 10.6 inch (27cm), depth of 8.8 inch (23cm) and weight of 4.5 lbs. (2.04 kg). All electronics and antennas should be mounted to be a rugged metal baseplate and enclosed in an ABS, UV resistant radome.
- 4.11 The bistatic microwave system shall have a temperature rating of -40° F to +150° F (-40° C to +66° C) and a relative humidity of 0 to 100%.
- 4.12 The bistatic microwave system shall provide an internal and external alignment, sensitivity adjustment, and input power indication that may be displayed and monitored with Model RM82 performance monitor and test set. One (1) RM82 monitor shall be provided.

## **5.0 Products – Alarm Reporting/Graphic Display System**

- 5.1 The Alarm Reporting/Graphic Display system shall, as a minimum, consist of a desktop computer (PC), dedicated only to the reporting and display of perimeter security information and equipped with the necessary I/O hardware, color monitor, and three (3) button mouse.
- 5.2 The Alarm Reporting system shall provide control room personnel with the various alarm conditions through each of the following methods:
  - 1. Visual indication, on color monitor, of alarm location
  - 2. On-screen text providing precise alarm location
  - 3. Relay contact closure output
  - 4. Serial RS232, RS485 or RS422 communications output

- 5.3 The field installed Processor Modules (PM's) shall communicate all system activity to the central PC based Alarm Reporting system via a serial RS-232 output. The output signal shall be a format capable of reception by standard, asynchronous, serial data equipment. Communication speed shall be 19.2 Kbps. A communications protocol shall be used that allows the receiving equipment to acknowledge the successful reception of each message.
- 5.4 The various Processor Modules shall provide to the central PC the precise location of a detected intrusion, tamper, or fall occurrence. The indication(s) shall remain on the display until cleared by operator action.
- 5.5 Intrusions or faults will be displayed with flashing red dots, indicating the actual location within each zone.
- 5.6 A line drawing of the perimeter, showing the various detection zones and major site landmarks, shall be provided on the color PC graphics display. All Zones that are "armed and secure" shall appear as green lines.
- 5.7 When an alarm occurs, the display indicates the exact location within 10 feet (3 meters) of the intrusion within the zone by a flashing red dot.
- 5.8 The Monitor Display and PC Control software shall provide three "soft keys". The three (3) keys shall provide specific combinations of Zone "Acknowledge", "Reset", "Access", and "Secure". The available "soft key" options at any given time are presented to the operator according to the current status of the system.
- 5.9 After an initial alarm, the display shall be capable of identifying the precise location of subsequent alarms and shall identify the fact that multiple zones are registering alarms.
- 5.10 The operator shall be capable of resetting each individual alarm.

## **6.0 Installation/Documentation/Services**

### **6.1 General**

- 6.1.1 Contractor shall confirm the necessary documentation to confirm that the system is installed in accordance with on-site requirements and manufacturer's installation instructions. All wire hook-up shall be performed by the contractor.
- 6.1.2 After installation of the system, the contractor shall make provisions for a manufacturer's technical representative to perform final on-site inspection, installation certification and training, coordinated with the owner or owner's representative.

- 6.1.3 Contractor or subcontractor shall be an approved, authorized and Factory Certified and Trained Installing Dealer for Southwest Microwave, Inc. Factory trained personnel must present a copy of the training certificate, with the name of person that will be actually installing system at the owner's facility. This person shall be on-site to ensure proper installation.
- 6.14 The installation locations of the PM's shall be governed by the 1,310 feet (400 meter) maximum distance of supported cable and is not governed by perimeter zoning.

**6.2 MicroPoint Cable Fence Intrusion Detection System**

- 6.2.1 The Fence Sensor Cable shall be attached at 9" intervals to the chain-link fabric with UV resistant cable ties at a mounting height determined by the manufacturer for this project.
- 6.2.2 The MicroPoint cable shall be capable of being cut on site during installation to any length up to a maximum of 656 feet (200m).
- 6.2.3 The "Sensitivity Leveling" function (as described in paragraph 2.2.6) shall be calibrated with the use of system software and automatically calibrated for every 1 meter of cable.
- 6.2.4 The partitioning of the perimeter fence into detection zones shall be established in software after installation of the system and in consideration of site conditions. Other considerations for zoning shall include the reduction of nuisance alarms and providing assessment advantages for patrol personnel. The proposed zoning shall be reviewed by the owner for approval.
- 6.2.5 The system shall utilize a distributed switching power network that provides dc power to all the modules without the use of separate power supplies. The configuration shall permit the use of a central UPS AC power supply for the entire system.
- 6.2.6 The system input power shall be capable of accepting standard dc voltage power supplies 12, 24, or 48 Vdc power. The system shall allow for dc power input from 10.5 to 60 Vdc.
- 6.2.7 The system shall support serial communication to allow remote modem diagnostics.

**6.3 Microwave Intrusion Detection System**

- 6.3.1 Contractor shall supply the manufacturer with details of site conditions and fence construction in the areas where microwave will be utilized. Manufacturer shall provide recommendations for the mounting post locations based on this information.

6.4 PC Based Alarm Reporting/Display System

- 6.4.1 The INTREPID MicroPoint Cable system shall be installed and calibrated on site through the use of a laptop or desk top PC computer with the Southwest Microwave Windows based software. No special equipment other than a common voltmeter shall be required to record system parameters or to carry out calibration.
- 6.4.2 The PC Alarm Reporting System individual components shall be installed in accordance with on-site requirements and manufacturer's installation instructions.
- 6.4.3 The system shall be capable of displaying sensitivity and threshold settings at the control PC providing both a graphic display and hard copy output of the system calibration status.
- 6.4.4 The system shall be capable of monitoring the MicroPoint cable on a real time basis using the Absolute Response display in the Site Manager Software.

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